IN THE CLAIMS:

Please amend the claims as indicated herein below:

1. (Currently Amended) A control system for a turboshaft engine comprising:

a) a first sensor for measuring a turbine speed parameter;

b) a second sensor for measuring the altitude at which the engine is operating;

c) means for providing a desired minimum fuel flow to the engine when an overspeed condition is detected based on the turbine speed parameter measured by the first sensor and when the engine is operating within a first ~~operating~~ altitude range as determined by the second sensor; and

~~b~~d) means for shutting off fuel flow to the engine when an overspeed condition is detected based on the turbine speed parameter measured by the first sensor and the engine is operating in a second ~~operating~~ altitude range as determined by the second sensor.

2. (Cancelled)

3. (Currently Amended) A control system as recited in claim 2, wherein the ~~relatively low altitude includes~~first altitude range is 0 to 10,000 feet above sea level and the ~~relatively high altitude~~second altitude range ~~exceeds~~ is 10,000 feet above sea level and above.

4. (Original) A control system as recited in claim 1, wherein an overspeed condition is detected along two different control logic paths, a first logic path which includes derivative and

non-derivative control logic and a second logic path which includes non-derivative logic.

5. (Original) A control system as recited in claim 4, wherein the non-derivative logic includes proportional logic.

6. (Original) A control system as recited in claim 1, further comprising a hardware latch having reset logic associated therewith.

7. (Original) A control system as recited in claim 1, further comprising software test interfaces for testing the performance of the control system.

8. (Original) A control system as recited in claim 1, wherein the means for providing a desired minimum fuel flow to the engine when an overspeed condition is detected includes a first solenoid valve and the means for shutting off fuel flow to the engine when an overspeed condition is detected includes a second solenoid valve.

9. (Original) A control system as recited in claim 1, wherein an overspeed condition is detected based on at least one of a power turbine speed signal, a gas generator speed signal and main rotor speed signal.

10. (Original) A control system as recited in claim 1, wherein the system is a dual channel system having an interchannel communication means for ensuring that a fault in one channel of

the system will not shut down the control system.

11. (Cancelled)

12. (Withdrawn) ~~A control system for a turboshaft engine comprising means for shutting off fuel flow to the engine when an overspeed condition is detected, wherein the overspeed condition is detected by first and second control logic paths, the first path including a derivative and a non-derivative path and the second path including a non-derivative path.~~

13. (Currently Amended) A control system as recited in claim 1, further comprising means for disabling the means for shutting off fuel flow to the engine when an overspeed condition is detected when the engine is operating below ~~an altitude of 10,000~~the second operating range.

14. (Currently Amended) A control system for a turboshaft engine comprising:

a) a first sensor for measuring a turbine speed parameter;

b) a second sensor for measuring the altitude at which the engine is operating;

a~~c~~) means for proving a minimum fuel flow to the engine when an overspeed condition is detected based on the turbine speed parameter measured by the first sensor and the engine is operating in a first ~~operating~~ altitude range as determined by the second sensor; and

b~~d~~) means for shutting off fuel flow to the engine when an overspeed condition is detected based on the turbine speed parameter measured by the first sensor and the engine is operating in a second ~~operating~~ altitude range as determined by the second sensor, provided that

the overspeed condition is detected along two different engine speed signal paths, including a derivative path and a non-derivative path.

15. (Cancelled)

16. (Currently Amended) A control system as recited in claim 15, wherein the ~~relatively low altitude~~first altitude range includes 0 to 10,000 feet above sea level and the ~~relatively high altitude~~second altitude range include ~~exceeds~~ 10,000 feet above sea level and above.

17. (Original) A control system as recited in claim 14, wherein the derivative path include derivative and proportional control logic and the non-derivative path includes proportional logic.

18. (Original) A control system as recited in claim 14, further comprising a hardware latch having reset logic associated therewith.

19. (Orignal) A control system as recited in claim 14, further comprising software test interfaces for testing the performance of the control system.

20. (Original) A control system as recited in claim 14, wherein the means for providing a desired minimum fuel flow to the engine when an overspeed condition is detected includes a first solenoid valve and the means for shutting off fuel flow to the engine when an overspeed condition is detected includes a second solenoid valve.

21. (Original) A control system as recited in claim 14, wherein an overspeed condition is detected based on at least one of a power turbine speed signal, a gas generator speed signal and main rotor speed signal.

22. (Original) A control system as recited in claim 14, wherein the system is a dual channel system having an interchannel communication means for ensuring that a fault in one channel of the system will not shut down the control system.

23. (Currently Amended) A method for limiting turboshaft engine overspeed comprising the steps of:

a) measuring at least one engine speed parameter;

b) sensing the altitude at which the engine is operating;

c) determining whether an overspeed condition exists based on the measured speed parameter using a control system which includes a first logic path having derivative and non-derivative control logic and a second logic path having non-derivative logic;

d) providing a desired minimum fuel flow to the engine when an overspeed condition is detected by the engine control system when the engine is operating in a first altitude range; and

e) shutting off fuel flow to the engine when an overspeed condition is detected by the engine control system and the engine is operating in a second ~~operating~~ altitude range.